### REMARKS

Upon entry of the instant Response & Amendment, Claims 1-8, 17-21, 23-32, 41-46 and 48 will remain pending in the application.

In the Office Action mailed August 21, 2006, Claims 1-48 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,846,850 issued to Schilling et al. Claims 1-48 are rejected under 35 U.S.C. §102(a) as being anticipated by WO 03/089,505 in the name of Doerge et al. Claims 1-48 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,688,833 issued to Lund et al. Claims I, 3-8, 25, and 27-48 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP 0,822,171 in the name of Tsuchiya et al. Claims 1-48 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 6,846,850 issued to Schilling et al. Claims 1-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Pat. No. 6,846,850. Claims 1-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 8, and 11-13 of copending Application No. 10/894,692, claims 1-9 of pending Application No. 10/965,349, and claims 1-8 of copending Application No. 10/295,315, each taken individually. The Examiner made those rejections FINAL. Applicants are filing the instant RCE to reopen prosecution.

## Rejections under 35 U.S.C. §102(e) as being anticipated by Schilling et al. '850

Claims 1-48 stand rejected under 35 U.S.C. §102(e), as being anticipated by U.S. Pat. No. 6,846,850 issued to Schilling et al. Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims. At page 3 of the Final Office Action mailed August 21, 2006, the Examiner states,

Patentees disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1, 1, 1, 3, 3-pentafluoropropane(HFC-245fa) and water (see each of the documents in their entirety). Patentees' disclosure is teaching of the instant polyol components and mixtures, HFC-245fa, and water to a degree that anticipation of applicants' combinations and their amounts is seen to be evident. The specific K-

values of applicants' claims, though not particularly specified, are held to be inherent to patentees' teaching owing to the similarities in the materials employed.

Applicants respectfully disagree and remind the Examiner that as stated in MPEP §2131, to anticipate a claim, a reference must teach every element of that claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226,1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Applicants note that the claims as amended exclude the presence of sorbitol from the claimed polyol blend, whereas Schilling et al. specifically require the presence of sorbitol in their polyurethane foam forming mixture.

Therefore, Applicants respectfully request the Examiner reconsider and reverse his rejection of Claims 1-8, 17-21, 23-32, 41-46 and 48 under 35 U.S.C. §102(e), as being anticipated by U.S. Pat. No. 6,846,850 issued to Schilling et al.

### Rejections under 35 U.S.C. §102(a) as being anticipated by Doerge et al.

Claims 1-48 stand rejected under 35 U.S.C. §102(a), as being anticipated by WO 03/089,505 in the name of Doerge et al. Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims. At page 4 of the Final Office Action, mailed August 21, 2006, the Examiner states,

WO 031/089,505 discloses preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1, 1, 1, 3, 3-pentafluoropropane(HFC-245fa), and water (see the entire document). WO 03/089,505's disclosure teaches the instant polyol components and mixtures, HFC- 245fa, and water to a degree that anticipation of applicants' combinations and their amounts is seen to be evident. The specific K-values of applicants claims, though not particularly specified, are held to be inherent to the teachings of WO 03/089,505 based on the make-up of the materials employed.

Applicants respectfully disagree with the Examiner and note that Doerge et al. specifically requires the addition of CO<sub>2</sub> whereas the instantly claimed invention does not.

Therefore, Applicants respectfully request the Examiner reconsider and reverse his rejection of Claims 1-8, 17-21, 23-32, 41-46 and 48 under 35 U.S.C. §102(a), as being anticipated by WO 03/089,505 in the name of Doerge et al.

### Rejections under 35 U.S.C. §103(a) as being rendered obvious by Lund et al.

Claims 1-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,688,833 issued to Lund et al. Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims. Beginning at page 5 of the Final Office Action, mailed August 21, 2006, the Examiner states,

Lund et al. disclose preparations of polyurethane foams having lowered K factors, superior performance and dimensional stability which are prepared from polyisocyanates, polyol mixtures of the specificity claimed by applicants, 1, 1, 1, 3, 3-pentafluoropropane(HFC-245fa), and water (see column 1 lines 47-57, column 2 lines 10-25, column 3 lines 24 et seq., column 4 lines 15-24,and column 5 lines 6-29, as well as, the entire document). Lund et al. discloses employment of aromatic amine initiated polyols as the sole polyol and therefore difference based on the polyol component make-up is not seen for claims 1, 3-8, 25, and 27-32.

Lund et al. differs from applicants' claims in that it does not particularly recite specific ranges of amount values for its blends of polyol components. However, Lund et al. recites the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects (see column 3 line 53 column 4 line 23). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of Lund et al, in varied amounts within the teachings of Lund et al. for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves nor more than the application of routine skill in the art of chemical engineering. In re Aller 105 USPQ 233. Similarly, the determination of

optimal values within a disclosed set of ranges is generally considered obvious. *In re Boesch* 205 USPQ 215.

Lund et al. differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set, forth by applicants' claims. However, Lund et al. discloses variation in the amounts of its HFC-245fa blowing agent for the purpose of controlling densities. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of Lund et al. for the purpose of controlling densities in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Again, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves nor more than the application of routine skill in the art of chemical engineering. In re Aller 105 USPQ 233. Similarly, the determination of optimal values within a disclosed set of ranges is generally considered obvious. In re Boesch 205 USPQ 215.

Applicants respectfully disagree with the Examiner's contention regarding the teaching of Lund et al. As stated in MPEP §2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves of in the knowledge generally available to one of ordinary skill in the art, citing *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

Clearly there is no such teaching, suggestion or motivation shown in the reference in this case. Lund et al. fails to teach or suggest the instantly claimed polyol blend. The claims as amended exclude the additional components disclosed by Lund et al.

Therefore, Applicants contend that nothing in the teaching of Lund et al. would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse his rejection of Claims 1-8, 17-21, 23-32, 41-46 and 48 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,688,833 issued to Lund et al.

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Rejections under 35 U.S.C. §103(a) as being rendered obvious by Tsuchiya et al.

Claims I, 3-8, 25, and 27-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over EP 0,822,171 in the name of Tsuchiya et al. Claims 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims. At page 4 of the Final Office Action, mailed August 21, 2006, the Examiner states.

EP-0,822,171 disclose preparations of polyurethane foams which are prepared from aromatic amine initiated polyether polyols, polyisocyanates, and 1, 1, 1, 3, 3-pentafluoropropane (HFC-245fa) (see examples 20-38 as well as, the entire document).

EP-0,822,171 differs from applicants' claims in that the amounts of HFC-245fa employed are not particularly limited to the ranges of values set forth by applicants' claims. However, EP-0,822,171 discloses employment of HFC-245fa in foaming compositions for the purpose of imparting its blowing effect. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied amounts of the HFC-245fa within the teachings of EP-0,822,171 for the purpose of controlling foaming degrees within the products obtained in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results: Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves nor more than the application of routine skill in the art of chemical engineering. In re Aller 105 USPQ 233. Similarly, the determination of optimal values within a disclosed set of ranges is generally considered obvious. In re Boesch 205 USPQ 215.

Applicants respectfully disagree with the Examiner's contention regarding Tsuchiya et al. Tsuchiya et al., like Lund et al., fail to teach or suggest modifying their disclosure to somehow arrive at the instantly claimed polyol blend.

Therefore, Applicants contend that nothing in the teaching of Tsuchiya et al. would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse his rejection of Claims I, 3-8, 25, and 27-32 under 35 U.S.C. §103(a) as being unpatentable over EP 0,822,171 in the name of Tsuchiya et al.

Rejections under 35 U.S.C. §103(a) as being rendered obvious by Schilling et al. '850

Claims 1-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,846,850 issued to Schilling et al. Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims. Beginning at page 9 of the Final Office Action, mailed August 21, 2006, the Examiner states.

Schilling et al. disclose preparations of polyurethane foams based on mixing and reacting isocyanates, polyol premixes as claimed, HFC-245fa, and auxiliaries and additive (see the entire document).

The Schilling et al. document differs from applicants' claims in that it does not particularly recite the specific ranges of amount values as claimed by applicants for their blends of polyol components. However, the Schilling et al. document does recite the employment of the specific polyols set forth in applicants' claims for the purpose of imparting their isocyanate reactive effects. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed combinations of the polyols of the Schilling et al. document in varied amounts within the teachings of the Schilling et al. document for the purpose of imparting their isocyanate reactive effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves nor more than the application of routine skill in the art of chemical engineering. In re Aller 105 USPQ 233. Similarly, the determination of optimal values within a disclosed set of ranges is generally considered obvious. In re Boesch 205 USPQ 215.

Applicants respectfully disagree with the Examiner's contention regarding Schilling et al. The shortcomings of Schilling et al. have been detailed hereinabove in connection with the anticipation rejection over that same reference and will not be repeated here in the interests of saving time and paper. Schilling et al. fail to teach or suggest the instantly claimed invention.

Therefore, Applicants contend that nothing in the teaching of Schilling et al. would lead one of ordinary skill in the art to the instantly claimed invention and respectfully request the Examiner reconsider and reverse his rejection of Claims 1-8, 17-21, 23-32, 41-46 and 48 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,846,850 issued to Schilling et al.

## Rejections under judicially created doctrine of obviousness-type double patenting over Schilling et al. '850

Claims 1-48 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claims 1-2 of U.S. Pat. No. 6,846,850 issued to Schilling et al. At page 11 of the Final Office Action, mailed August 21, 2006, the Examiner states,

Claims 1-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,846,850. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims and the teaching effects of the supporting disclosure disclose preparations of polyurethane foams which are prepared from polyisocyanates, polyol mixtures of polyethers and polyesters, 1, 1, 1, 3, 3- pentafluoropropane(HFC-245fa), and water wherein it would have been obvious for one having ordinary skill in the art to have varied the combinations and their respective amounts within the claims of the patents with expectation of success in order to arrive at the products and processes of applicants' claims in the absence of a showing of new or unexpected results.

Rejection are maintained because the Terminal Disclaimer referred to is not of record. Applicants need to resubmit a copy of the previously submitted Terminal Disclaimer.

Applicants' postcard receipt is noted, and it is requested that a copy of the referred to Terminal Disclaimer be submitted for review and entry on the record

Applicants herewith submit a copy of the previously submitted Terminal Disclaimer and respectfully request that this Terminal Disclaimer over Schilling et al. '850 be entered, that no additional charges be assessed and that the Examiner

remove his rejection of Claims 1-48 under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claims 1-2 of U.S. Pat. No. 6,846,850 issued to Schilling et al.

# Provisional rejections under judicially created doctrine of obviousness-type double patenting over US Serial No. 10/894,692

Claims 1-48 stand provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claims 1, 2, 5, 8 and 11-13 of copending application Serial No. 10/894,692. Instant Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims.

Applicants herein reiterate their offer, made in their Response mailed June 9, 2006 and deemed appropriate and acceptable by the Examiner in the Final Office Action mailed August 21, 2006, to file a Terminal Disclaimer disclaiming that portion of the term of any patent granted in the instant application which would exceed that of copending application Serial No. 10/894,692.

# <u>Provisional rejections under judicially created doctrine of obviousness-type double patenting over US Serial No. 10/965,349</u>

Claims 1-48 stand provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claims 1-9 of copending application Serial No. 10/965,349. Instant Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims.

Applicants herein reiterate their offer, made in their Response mailed June 9, 2006 and deemed appropriate and acceptable by the Examiner in the Final Office Action mailed August 21, 2006, to file a Terminal Disclaimer disclaiming that portion of the term of any patent granted in the instant application which would exceed that of copending application Serial No. 10/965,349.

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<u>Provisional rejections under judicially created doctrine of obviousness-type double patenting over US Serial No. 10/295,315</u>

Claims 1-48 stand provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over Claims 1-8 of copending application Serial No. 10/295,315. Instant Claims 9-16, 22, 33-40 and 47 have been cancelled, thus obviating any grounds for rejection based upon those claims.

Applicants herein reiterate their offer, made in their Response mailed June 9, 2006 and deemed appropriate and acceptable by the Examiner in the Final Office Action mailed August 21, 2006, to file a Terminal Disclaimer disclaiming that portion of the term of any patent granted in the instant application which would exceed that of copending application Serial No. 10/295,315.

### Conclusion

Applicants have amended Claims 1, 17, 25 and 41 and have cancelled Claims 9-16, 22, 33-40 and 47. Such claim amendments add no new matter and find support in the specification.

Applicants submit that the instant application is in condition for allowance. Accordingly, reconsideration and a Notice of Allowance are respectfully requested for Claims 1-8, 17-21, 23-32, 41-46 and 48. If the Examiner is of the opinion that the instant application is in condition for other than allowance, he is requested to contact the Applicants' attorney at the telephone number listed below, so that additional changes to the claims may be discussed.

Respectfully submitted,

Bayer MaterialSci8ence LLC 100 Bayer Road Pittsburg, Pennsylvania 15205-9741 (412) 777-3024 FACSIMILE PHONE NUMBER: (412) 777-3902 s:\shared\kq\jem467rceam8044 John E. Mrozinski, Jr. Attorney for Applicants Reg. No. 46,179